

ACE MEETING, July 13, 2004

- Tevatron Status

- Tevatron has been less reliable the last two weeks but we have still written a decent amount of data to tape. See [All Experimenters' Meeting summary](#).
- Wet engine repair today will mean quiet time for day shift.
- Rest of week should be "stack and store" with continued machine studies in the background or at end of stores.
- "Mixed mode" shot last week had initial luminosity of almost 100E30! They will do another mixed mode shot this week. If proton losses are under control this time, we could be taking data at record initial luminosity.

- Miscellaneous Ace Items

- Tevatron Shutdown starts Monday, August 23. We have 6 more weeks of data taking with complete detector including healthy COT.
- **High efficiency** (read "writing data to tape") is a balancing act between doing operations quickly and doing operations correctly.
- Keeping that in mind, here are some notes from Masa for last week....

Date: Mon, 12 Jul 2004 21:33:49 -0500

From: Masashi Tanaka

Subject: Re: CDF Ace Meeting, Tuesday, July 13, 2004 8:30 a.m.

Here are few notes from last week's my experience which might be usefull for aces.

- (1) How to recover from Plug HV problem
- (2) How to recover from L2 decision TO
- (3) How to recover from trigger inhibit from "bit 159"
- (4) How to recover from PES/PPR calibration corruption in the middle of the store

If Aces are able to take proper action, (1)--(3) are just source of few minutes downtime. Otherwise it could cause hours of downtime. Recovering procedure for (4) is rather expert operation. But we took bad run for PES overnight because sift crew didn't page

expert. This is the reason good run luminosity for store 3639 is only 63%.

Hope this helps.

Regards, Masa

- Guillelmo/Alberto remind you to "read pop-up instructions" carefully.
(Side comment: historically, L3/EVB problems seem to give ACEs most problems/confusion. As you finish your shifts, I would be happy to take any suggestions on how to improve training/help for these systems.)
- Phil Schlabach: comments on assigning downtime for muon trips due to beam spikes.



CDF Operations Report

JJ Schmidt (for Masa Tanaka)

12-July-2004

All Experimenters' Meeting



Store Summary (6/28 to 7/04)

Store	Start Date	Duration (hours)	Inst Lum Initial <small>e30 cm-2 s-1</small>	Int. Lum Delivered <small>nb-1</small>	Live Lum <small>nb-1</small>	Tevatron Terminate
3597	6/28	24.0	67.5	2,417	2,129 88%	OK
	Stores 3599 and 3606 lost before HEP collisions					
3610	7/01	18.4	37.8	1,303	1,132 87%	OK
3612	7/02	21.9	65.8	2,095	1,818 87%	OK
3614	7/03	26.9	79.5	3,023	2,694 89%	OK
3616	7/04	11.4	79.1	1,859	1,603 86%	Quench Comp. trip
Total 3597-3616		102.6		10,697	9,376 88%	



Store Summary (7/05-7/11)

Store	Start Date	Duration (hours)	Inst Lum Initial e30 cm-2 s-1	Int. Lum Delivered nb-1	Live Lum nb-1	Tevatron Terminate
3619	7/05	25.9	63.3	2,289	2,022 88%	OK
3621	7/06	6.7	98.5 (82.0*)	1,342	1,145 85%	quench
3629	7/08	4.1	58.8	682	564 83%	quench
3639	7/09	31.1	81.8	3,194	2,701 85%	OK
3641	7/11	9.5	85.2	1,849	1,591 86%	Power glitch
3650	7/12		69.5	Ongoing store		
Total 3619-3641		77.4		9,355	8,023 86%	
FY2004 (3033 up)	11/22/03	3,075		268,824	211,650 79%	



CDF STATUS

- Central Outer Tracker still looking fine with HV full on for all superlayers.
- Rest of detector has suffered no major problems over past two weeks.
- Current trigger table handles 90E30 with about 15% deadtime. DAQ deadtime less than 5% integrated over store.
- Beam conditions (proton halo losses and abort gap losses) have allowed us to integrate Silicon detectors at beginning of all stores except 3621 (record "mixed mode" store).
- As a result, CDF has been writing more than 85% of delivered luminosity to tape. This is historically very good but our goal is 90% between now and shutdown.



CDF Run IIa Detector



